

Type. Adult female. B.M. no. 7. 5. 25. 11. Original number 24. Collected by Mr. C. W. Turner on 27th February, 1906.

Hab. Aberfeldy Dist., O.R.C.

Other specimens from Ladybrand and Vredefort show that this form extends all over the Orange River Colony, and even to Bechuanaland.

Pedetes cafer salinæ, subsp. n.

Size and general characters as in true *P. cafer*.

General colour above as in *P. cafer*, though slightly paler, much redder than in *P. c. orangiæ*; the ground-colour of the hairs "vinaceous cinnamon" rather than "pinkish buff," and the proportion of black greater. The underside quite as in *P. c. orangiæ*.

Skull-characters as in true *P. cafer*.

Dimensions of type:—

Head and body 398 mm.; tail 464; hind foot 144; ear 70.

Skull: upper length 90; basilar length 63; zygomatic breadth 57.

Type. Adult female. B.M. no. 6. 4. 3. 86. Original number 1345. Collected by Mr. C. H. B. Grant on 30th December, 1905, and presented to the Museum by Mr. C. D. Rudd.

Hab. Woodbush, Zoutpansberg Dist., N.W. Transvaal.

Two other specimens taken at the same time and place do not materially differ from the type.

IV.—*Descriptions of new Species of African Spiders and Solifugæ.* By A. S. HIRST.

Pterinochilus Hindei, sp. n.

♂.—*Cephalothorax* equal in length to patella, tibia, and tarsus of maxillipalp and considerably shorter than patella and tibia of fourth leg. Ocular tubercle considerably longer than broad, the clypeus narrow.

Legs. 4, 1, 2, 3. Metatarsus of first leg sinuate, with the distal end slightly thickened, and leaving but little space between metatarsus and spur of tibia when closed on tibia; tibia of first leg more slender than femur. Patella and tibia

of first leg longer than the corresponding segments of the fourth.

Palpal organ resembling closely that of *P. murinus*, the terminal portion of the style very long and slender (fig. 1).

Fig. 1.



Palpal organ of *Pterinochilus Hindei*.

Measurements in mm. Length of cephalothorax 13·5, of patella, tibia, and tarsus of palp 14·75, of first leg 49, of second leg 44·5, of third leg 41, of fourth leg 50, of patella and tibia of first leg 16·5, of patella and tibia of fourth leg 15·25; total length 27.

Hab. A single male specimen was collected by Mr. S. L. Hinde at Fort Hall (4400 feet), British East Africa.

Remarks. The male of *P. Hindei* differs from that of *P. murinus*, to which it is closely allied, in the much smaller size and in that the cephalothorax equals the patella, tibia, and tarsus of the maxillipalp, whilst in *murinus* the cephalothorax considerably exceeds the patella, tibia, and tarsus of the palp in length.

Pterinochilus murinus, Pocock.

Pterinochilus murinus, Pocock, Proc. Zool. Soc. 1897, p. 753, pl. xliii. fig. 4; 1898, p. 501.

♂.—*Cephalothorax* longer than patella, tibia, and tarsus of maxillipalp, and shorter than patella and tibia of fourth leg.

Legs. Metatarsus of first leg sinuate and dilated distally, tibia of first leg more slender than femur. Patella and tibia of first leg exceeding patella and tibia of fourth in length.

Size. This species is much larger than *P. Hindei*.

Measurements in mm. Length of cephalothorax 19, of patella, tibia, and tarsus of palp 17·25, of patella and tibia of first leg 23, of patella and tibia of fourth leg 20; total length 32.

Hab. Mombasa (*Capt. Crawshaw*).

Pterinochilus meridionalis, sp. n.

♂.—*Colour.* Cephalothorax greyish black, with lines of yellowish hairs radiating from the fovea; sternum and ventral surface of coxæ of legs deep black; abdomen greyish yellow, the ventral surface marked with a dark patch.

Cephalothorax almost equal in length to patella and tibia of fourth leg, much shorter than patella and tibia of first leg, and considerably exceeding patella, tibia, and tarsus of maxillipalp in length. Ocular tubercle longer than wide, clypeus of moderate length.

Legs. Metatarsus of first leg moderately stout, curved, thickened apically, of much less length than tibia, and leaving but little space between spur and base of metatarsus when closed on tibia.

Palpal organ with the style fairly long and slender (fig. 2).

Fig. 2.



Palpal organ of *Pterinochilus meridionalis*.

Measurements in mm. Length of cephalothorax 14, of patella, tibia, and tarsus of palp 11·75, of tibia of first leg 11, of metatarsus of first leg 9·5, of patella and tibia of first leg 17, of patella and tibia of fourth leg 14·5; total length 25.

Hab. A single male specimen was collected at Dowa, British Central Africa, by Mr. A. R. Andrew during March 1907.

Heteroscodra crassipes, sp. n.

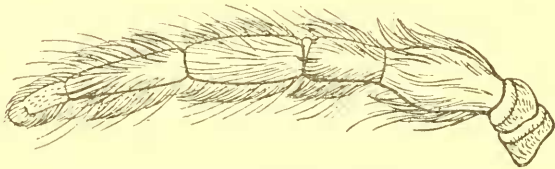
♀.—*Colour*. Legs marked with dark spots, which are distributed much as in *H. maculata*.

Cephalothorax longer than wide, of much less length than patella and tibia of fourth leg, and exceeding patella and tibia of first leg in length.

Sternum a little longer than broad; posterior sigilla situated in the posterior third of the sternum and at but little distance from the lateral margins.

Legs. Tibia and patella of first leg much shorter than the corresponding segments of the fourth. Fourth leg long-haired and very stout, the femur being much swollen and the patella and tibia of considerable thickness. Metatarsus of fourth leg a little longer than tibia (fig. 3).

Fig. 3.

Fourth leg of *Heteroscodra crassipes* from above.

Measurements in mm. Length of cephalothorax 21, of first leg 60, of second leg 57, of third leg 57, of fourth leg 77, of patella and tibia of first leg 20, of patella and tibia of fourth leg 25; total length of body 50; width of cephalothorax 18·25, of femur of fourth leg 7·75, of tibia of fourth leg 5·5.

Hab. An adult female from Efulen, Camaroons, and another from the forest 25 miles inland to the east of Kribi, Camaroons. These specimens were collected by Mr. G. L. Bates.

Remarks. This spider differs from *H. maculata*, the only other species of the genus, in the much greater thickness of the fourth pair of legs and in the great dilatation of their femora.

Cladomelea ornata, sp. n.

♀.—*Colour* pale yellow; tarsi and distal portions of metatarsi of legs fuscous, the metatarsi of the legs of the anterior pairs being marked in the middle of their length with an additional dark patch; patellæ and tibiæ of legs

with light brown spots; cephalothoracic spines apically darkened.

Cephalothorax. Ocular tubercle moderately elevated as compared with that of *C. longipes*, the three spines of the cephalothorax of fair length and the middle one slightly curved in an anterior direction (fig. 4).

Fig. 4.



Side view of cephalothorax of *Clasiomelea ornata*.

Abdomen. Dorsal tubercles of abdomen small, almost uniform in size, and distributed much as in *C. longipes*. The two median tubercles of the second row are replaced, however, by a single tubercle. Additional tubercles are present in the posterior median part of the abdomen, a couple being situated between the row of three tubercles and the lozenge-shaped group of four tubercles and another pair placed posteriorly to the lozenge-shaped group.

Legs. Patella and tibia of first leg a little longer than metatarsus and tarsus, and with tibia, metatarsus, and tarsus more slender than is the case in *C. longipes*.

Measurements in mm. Length of first leg 27, of second leg 19.5, of third leg 10, of fourth leg 13.5, of posterior cephalothoracic spine 2.75, of ocular tubercle .5, of cephalothorax 4.75, of abdomen 10; total length 14.5; breadth of cephalothorax 4.75, of abdomen 12.

Egg-cocoon pale yellow in colour, hemispherical, the surface smooth, the pedicle very short.

Hab. Dry foot-hills, South-east Ruwenzori, altitude 3400 feet; a single female specimen was collected by the British Expedition to Ruwenzori in May 1906.

Remarks. The more important differences between this new form and *C. longipes* are shown below. The characters of the latter species are in part taken from a female specimen from San Salvador, Congo.

Ocular tubercle moderately elevated, the three spines of the cephalothorax fairly long; tubercles of dorsal surface subequal in size; patella

- and tibia of first leg together a little longer than the metatarsus and tarsus *C. ornata*, sp. n.
 Ocular tubercle high, the three spines of the cephalothorax long; abdomen dorsally with a pair of antero-lateral enlarged tubercles; patella and tibia of first leg together a little shorter than the metatarsus and tarsus. *C. longipes*, Cambr.

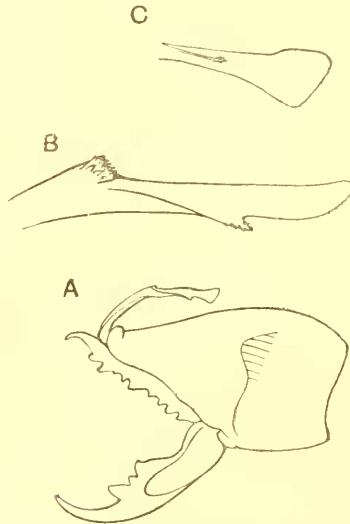
Solpuga Fordi, sp. n.

♂.—*Colour* pale yellow; mandible and head-plate pale brown above, abdomen dorsally pale or darkened.

Head-plate exceeding tibia or metatarsus and tarsus of maxillipalp by nearly two thirds of its breadth.

Mandible with the end curved. Anterior teeth two in number and separated from the succeeding large tooth by two intermediate ones, the first of these being exceedingly

Fig. 5.



- A. Mandible of *Solpuga Fordi* from the inner side.
 B. Distal half of flagellum of *S. Fordi* from above.
 C. Side view of terminal portion of flagellum of *S. Fordi*.

minute. Flagellum dorsally provided with a spined projection on angle, situated at the junction of the dark-coloured anterior part with the distal and paler part. Inner side of flagellum furnished with a smooth ridge (sometimes with a few spines towards the distal end) running from the angular point and

terminating towards the distal end of the flagellum in a spined projection. Distal part of flagellum dilated and squarely truncate. Flagellum inserted above the interval between the two anterior teeth and extending posteriorly to the middle of the mandible; basal lamina moderately elevated (fig. 5).

Maxillipalp. Tibia, metatarsus, and tarsus of maxillipalp ventrally provided with numerous cylinder-bristles, those of the metatarsus and tarsus unequal in size and more numerous than those of the tibia.

Measurements in mm. Length of tibia of maxillipalp 13·75, of metatarsus and tarsus of maxillipalp 12; breadth of cephalothorax 8. (In another specimen tibia 12, metatarsus and tarsus 11, cephalothorax 6·5.)

Hab. Two males of this new form were collected by Captain R. Ford in British East Africa (near Lake Baringo?).

Remarks. The specimens are dry and somewhat shrunken, and therefore the total length cannot be given. The colour also is somewhat faded. The species may be readily distinguished by the peculiar form of the flagellum.

V.—*Remarks on Prof. L. von Méhely's Paper “ Zur Lösung der ‘ Muralis-Frage.’ ”* By G. A. BOULENGER, F.R.S.

PURSUING his studies towards the solution of the *Lacerta muralis* problem, studies which, it is already perfectly clear, will result in a plethora of ill-defined Jordanian species, the distinguished Hungarian zoologist Prof. von Méhely has recently published a short paper* in which he attempts to prove that the derivation of forms must have taken place in a direction the reverse of that postulated by Eimer† and since endorsed by most workers at this difficult group, including myself, and to which Dr. Gadow's recent investigation of the American lizards of the genus *Cnemidophorus*‡ has given further support.

The numerous variations in the pattern of markings in *L. muralis* fall roughly under five heads—*striated*, *spotted*, *reticulated*, *barred*, *ocellated*. It is evident to any one studying large series that these different types of markings are insensibly connected by every possible gradation §. The

* Ann. Mus. Hung. v. 1907, p. 84, pl. iii.

† Arch. f. Naturg. 1881, p. 375.

‡ Proc. Zool. Soc. 1906, i. p. 277.

§ Eimer has pointed out that the pattern on the posterior part of the body anticipates the evolution of that on the anterior part. This is true